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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/893,465	06/29/2001	Dominique Gurgeon	10015737-1	5281

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HEWLETT-PACKARD COMPANY
Intellectual Property Administration
P.O. Box 272400
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EXAMINER

NALVEN, ANDREW L

ART UNIT	PAPER NUMBER
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2134

DATE MAILED: 05/12/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 09/893,465	Applicant(s) GOUGEON ET AL.	
	Examiner Andrew L. Nalven	Art Unit 2134	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 29 June 2001.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-6 and 10-20 is/are rejected.
- 7) ☒ Claim(s) 7-9 and 19 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 29 June 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

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DETAILED ACTION

1. Claims 1-20 are pending.

Response to Arguments

2. Applicant's arguments filed 3/3/2005 regarding the Veil reference have been fully considered but they are not persuasive.

3. Applicant has argued on pages 9-10 that the Veil reference fails to teach a file signing tool arranged to receive a file to be signed, to access the smartcard, and signing the file by accessing the smartcard. Examiner respectfully disagrees. Veil teaches a file signing tool that receives a file (Veil, column 11 lines 1-11, data is captured and signed), accesses the smartcard and facilitates signing by accessing the smartcard ((Veil, column 11 lines 45-52). Thus, Veil teaches a file-signing tool where a smartcard is accessed in order to sign a document. The signing taking place by submitting a hash value to the smartcard, the smartcard performing signing operations on the hash value, and returning the hash value to the file signing tool where it can be attached to the document.

4. Applicant has further argued on page 10 that the Veil patent fails to teach "an owner certificate installed on said terminal for use by the terminal in authenticating the signer certificate" (Claim 5). Examiner respectfully disagrees. Examiner contends that Veil does teach "an owner certificate installed on said terminal for use by the terminal in

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authenticating the signer certificate” (Veil, column 13 lines 30-41, column 12 lines 15-30). Veil teaches that a certificate may be stored on the terminal (Veil, column 12 lines 15-19) for future use in authenticating signer certificates (Veil, column 12 lines 20-30). The certificates are stored as “pre-verification certificates” and are utilized for accelerated verification of incoming certificates (Veil, column 12 lines 30-38).

5. Applicant’s arguments filed 3/3/2005 regarding the Sudia reference are moot in view of the new grounds of rejection.

6. Applicant’s arguments filed 3/3/2005 regarding the Weiss reference have been fully considered, but are not persuasive.

7. Applicant has argued on page 11 that the Weiss reference fails to teach “requiring multiple PINs before the smartcard can be accessed” and Applicant asserts that a PIN is a number that is stored on a device for self-verification. Examiner respectfully disagrees with both assertions. A PIN is a number entered in order to gain access to a device or data. A PIN is not required to be stored on a device. Examiner has relied upon Weiss to show a system where entry of two PINs are necessary to gain authorization. Weiss teaches the entry of a first pin (Weiss, page 107 column 2, password) and a second PIN (Weiss, page 107 column 2, response to challenge code). Thus, Weiss teaches two PINs to gain access to a single system, a terminal in the system of Weiss.

8. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

9. Claims 1-4, 6, 11, and 13-17 are rejected under 35 U.S.C. 102(b) as being anticipated by Veil et al US Patent No. 6,092,202.

10. With regards to claims, 1, 11, 13, Veil teaches a smartcard having stored thereon a private key (Veil, column 11 lines 23-28, private key), a file signing tool arranged to receive a file to be signed (Veil, column 11 lines 1-11, data is captured and signed), to access the smartcard (Veil, column 11 lines 45-52), and to download signed files to the terminal (Veil, column 11 line 66 – column 12 line 3), wherein the smartcard includes an embedded secure processor programmed to perform all digital signing operations that require access to the private key (Veil, column 11 lines 42-52) before supplying results of the operations to the file signing tool, the file signing tool then performing further processing necessary to generate a digital signature that is appended to the file download to the terminal (Veil, column 11 lines 45-52, secure hash).

11. With regards to claims 2, 14, Veil teaches the smartcard having stored thereon a signer certificate containing a public key corresponding to the private key (Veil, column 11 lines 23-28, digital certificate with embedded public key).

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12. With regards to claims 6 and 18, Veil teaches the smartcard storing a PIN wherein the smartcard is arranged to perform digital signing operations only if a corresponding PIN is input through the file signing tool (Veil, column 11 lines 29-35).

Claim Rejections - 35 USC § 103

13. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

14. Claims 5 and 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Veil et al US Patent No. 6,092,202 in view of Sudia US Patent No. 5,659,616.

15. With regards to claims 3, 15, Veil fails to teach the signer tool being arranged to retrieve the signer certificate. Sudia teaches the signer tool being arranged to retrieve the signer certificate from the smartcard and append the signer certificate to the signed file for use by the terminal in authenticating the digital signature generated by the smart card and file signing tool (Sudia, Figure 7 Item 700, column 9 lines 51-55, authorization certificate). At the time the invention was made, it would have been obvious to a person of ordinary skill in the art to utilize Sudia's method of appending signer certificates because it offers the advantage of providing non-repudiation to prove to a third party that only the signer could have created the signature (Sudia, column 3 lines 10-22).

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16. With regards to claim 4, 16, Veil as modified teaches the signer certificate including fields designating file types that may be authenticated by the signer certificate (Sudia, column 10 lines 50-64).

17. With regards to claims 5 and 17, Veil as modified teaches an owner certificate installed on the terminal for use by the terminal in authenticating the signer certificate (Veil, column 13 lines 30-41, column 12 lines 15-30).

18. Claim 10 is rejected under 35 U.S.C. 103(a) as being unpatentable over Veil et al US Patent No. 6,092,202 in view of Kenneth Weiss "When A Password Is Not A Password."

19. With regards to claim 10, Veil teaches everything described above, but fails to teach an authentication level indicating a number of pins to enter in order to access. Weiss teaches a smartcard where high security warrants the entering of a number of PINs in order to access the smartcard (Weiss, page 107 column 2 "Challenge-Response" PIN and challenge code). At the time the invention was made, it would have been obvious to a person of ordinary skill in the art to utilize Weiss' method of inputting multiple PINs with Sudia's secure digital signature system because it offers the advantage of providing conclusive proof that the user is in possession of something secret and possesses the smartcard thus providing secure access (Weiss, page 107 column 2 "Challenge-Response" password and response to challenge code).

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20. Claim 20 is rejected under 35 U.S.C. 103(a) as being unpatentable over Veil et al US Patent No. 6,092,202 and Kenneth Weiss "When A Password Is Not A Password" as applied to claim 7 above, and further in view of Deo et al US Patent No. 5,721,781.

21. With regards to claim 20, Veil as modified above fails to teach different PINs permitted access to different private keys and public key certificates having different file type properties thereby enabling different authorization levels to be established. Deo teaches multiple PINs each being permitting access to a different application on a smart card (Deo column 5 lines 57-65, unique identifications to each application as a special password) and each application on a smart card having its own certificate thereby providing different authorization levels (Deo, column 5 lines 62-65, column 10 lines 31-55). At the time the invention was made, it would have been obvious to a person of ordinary skill in the art to utilize Deo's method of permitting access to different certificates using different PINs with Sudia as modified because it offers the advantage of allowing different applications to each have different certificates, public keys, and private keys attached to them thus allowing a single card to provide multiple services (Deo, column 2 lines 26-40).

Allowable Subject Matter

22. Claims 7-9 and 19 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

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23. The following is a statement of reasons for the indication of allowable subject matter:

24. Claim 7 defines the distinct feature of storing an authentication level indicating a number of PINs that must be input in order to access the smartcard. The closest prior art, Sudia, Deo, and Weiss teach the use of single PINs or multiple PINs, but fail to teach an authentication level indicating the number of required PINs.

25. Claims 8 and 19 define the distinct feature of combining PINs to form a combined PIN to be compared with a PIN stored on the smartcard before digital signing operations are performed. The closest prior art, Sudia, Deo, and Weiss teach the use of single PINs or multiple PINs, but fail to teach the combining of PINs for use in comparing against a stored PIN and thus the cited prior art fails to anticipate or render the above limitation obvious.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not

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mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

26. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Andrew L. Nalven whose telephone number is 571 272 3839. The examiner can normally be reached on Monday - Thursday 8-6, Alternate Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gregory Morse can be reached on 571 272 3838. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



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SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2100

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Andrew Nalven

